

**SECTION 10 28 00
TOILET AND BATH ACCESSORIES**

SPEC WRITER NOTES:

1. Use this section only for NCA projects.
2. Delete between //____// if not applicable to project. Also delete any other item or paragraph not applicable in the section and renumber the paragraphs.
3. Use this section for custom fabricated items in spaces listed.
4. Add items custom designed for these spaces. Verify items are detailed.
5. Verify that the drawings show the location and position of accessory items to be provided. Location of these items may be scheduled at the end of this section; however they must be shown on floor plans.
6. Show on room elevations dimension/location of accessories, including length and configuration of grab bars, towel bars, mirror sizes, and shelves.
7. See VA Standard details identified in list in parenthesis following item. Delete reference from project specification.
8. Coordinate to use same terminology used in this section and on the drawings.

PART 1 - GENERAL

1.1 DESCRIPTION

- A. This section specifies manufactured items usually used in toilets, baths, locker rooms, and at sinks in related spaces.

SPEC WRITER NOTES:

1. When accessories must be identified and located on the drawings by numbers and letters, place the full descriptive title of the accessory with the drawing symbol in the schedule.
2. Coordinate to use the same terminology used in this section.

B. Items Specified:

1. Paper towel dispenser.
2. Combination paper towel dispenser and disposal unit.
3. Waste receptacles.
4. Toilet tissue dispenser.
5. Grab Bars: (10800-1.DWG).

6. Shower curtain rods: (10800-2.DWG) and (10800-3.DWG).
 7. Clothes hooks, robe or coat.
 8. Towel bars.
 9. Metal framed mirror: (10800-7.DWG).
 10. Soap dishes.
 11. Sanitary napkin disposal.
 12. Toilet seat cover dispenser.
 13. Diaper changing station.
 14. Electric hand dryer.
 15. Mop racks.
 16. Stainless steel shelves, // Type 44 // Type 45 // Type 45C // (10801-1.DWG).
 17. Stainless steel shelves at wheelchair lavatory.
- C. This section also specifies custom fabricated items used in toilets and related spaces.

1.2 RELATED WORK

- A. Color of finishes: Section 09 06 00, SCHEDULE FOR FINISHES.
- //B. Ceramic toilet and bath accessories: Section 09 30 13, TILING//.
- C. Color of vinyl fabric: Section 09 06 00, SCHEDULE FOR FINISHES.

1.3 SUBMITTALS

- A. Submit in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.
- B. Shop Drawings:
 - SPEC WRITER NOTES:
 1. Select first paragraph or select Items 2 through 5.
 1. //Provide for each product specified.//
 2. //Provide for paper towel dispenser and combination dispenser and disposal units.//
 3. //Provide for metal framed mirrors, showing shelf where required, fillers, and design and installation of units when installed on ceramic tile wainscots and offset surfaces.//
 4. //Provide for shower Curtain rods, showing required length for each location.//
 5. //Provide for grab bars, showing design and each different type of anchorage.//
 6. Show material and finish, size of members, and details of construction, installation and anchorage of mop racks.
- C. Samples:

1. One of each type of accessory specified.
 2. After approval, samples may be used in the work.
- D. Manufacturer's Literature and Data:
1. Provide for all accessories specified.
 2. Show type of material, gages or metal thickness in inches, finishes, and when required, capacity of accessories.
 3. Show working operations of spindle for toilet tissue dispensers.
- E. Manufacturer's Certificates:
1. Attest that soap dispensers are fabricated of material that cannot be affected by liquid soap or aseptic detergents, Phisohex and solutions containing hexachlorophene.
 2. Confirm that anodized finish is as specified.

1.4 QUALITY ASSURANCE

- A. Each product must meet the requirements specified and be a standard commercial product of a manufacturer regularly presently manufacturing items of type specified.
- B. Each accessory type to be the same and be made by the same manufacturer.
- C. Assemble each accessory to the greatest extent possible before delivery to the site.
- D. Include additional features, which are not specifically prohibited by this specification, but which are a part of the manufacturer's standard commercial product.

1.5 PACKAGING AND DELIVERY

- A. Pack accessories individually to protect finish.
- B. Deliver accessories to the project only when installation work in rooms is ready to receive them.
- C. Deliver inserts and rough-in frames to site at appropriate time for building-in.
- D. Deliver products to site in sealed packages of containers; labeled for identification with manufacturer's name, brand, and contents.

1.6 STORAGE

- A. Store products in weathertight and dry storage facility.
- B. Protect from damage from handling, weather and construction operations before, during and after installation in accordance with manufacturer's instructions.

1.7 APPLICABLE PUBLICATIONS

A. Publications listed below form a part of this specification to extent referenced. Publications are referenced in text by the basic designation only. Comply with applicable provisions and recommendations of the following, except as otherwise shown or specified.

SPEC WRITER NOTES:

1. Remove reference citations that do not remain in Part 2 or Part 3 of edited specification.
2. Verify and make dates indicated for remaining citations the most current at date of submittal; determine changes from date indicated on the TIL download of the section and modify requirements impacted by the changes.

B. American Society for Testing and Materials (ASTM):

A167-99(2009)	Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet and Strip
A176-99(2009)	Stainless and Heat-Resisting Chromium Steel Plate, Sheet, and Strip
A269/A269M-15a(2019)	Seamless and Welded Austenitic Stainless Steel Tubing for General Service
ASTM A312/A312M-22	Seamless and Welded Austenitic Stainless Steel Pipes
A653/A653M-22	Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process
A1011/A1011M-18a	Steel, Sheet and Strip, Hot-Rolled, Carbon, Structural, High-Strength Low-Alloy with Improved Formability, and Ultra-High Strength
B456-17(2022)	Electrodeposited Coatings of Copper Plus Nickel Plus Chromium and Nickel Plus Chromium
C1036-21	Flat Glass
D635-22	Rate of Burning and/or Extent and Time of Burning of Plastics in a Horizontal Position
D3690-19	Vinyl-Coated and Urethane-Coated Upholstery Fabrics - Indoor
F446-19	Consumer Safety Specification for Grab Bars and Accessories Installed in the Bathing Area

C. American Welding Society (AWS):

D10.4-86 (R2000) Welding Austenitic Chromium-Nickel Stainless
Steel Piping and Tubing

- D. The National Association of Architectural Metal Manufacturers (NAAMM):
AMP 500 Series Metal Finishes Manual
AMP 500-505-06 Metal Finishes Manual and Finishes for
Stainless Steel

PART 2 - PRODUCTS

SPEC WRITER NOTES:

1. Make material requirements agree with applicable requirements specified in the referenced Applicable Publications.
2. Update and specify only that which applies to the project.

2.1 MATERIALS

- A. Stainless Steel:
1. Plate or sheet: ASTM A167, Type 302, 304, or 304L, except ASTM A176 where Type 430 is specified, 0.0299-inch thick unless otherwise specified.
 2. Tube: ASTM A269, Type 304 or 304L.
- B. Stainless Steel Tubing: ASTM A269, Grade 304 or 304L, seamless or welded.
- C. Stainless Steel Pipe: ASTM A312; Grade TP 304 or TP 304L.
- D. Steel Sheet: ASTM A653, zinc-coated (galvanized) coating designation G90.
- E. Glass: ASTM C1036, Type 1, Class 1, Quality q2, for mirrors.
- F. Vinyl Covering: ASTM D3690, Vinyl coated fabric, Class A.
- G. Plywood: PS1, Grade CD.

2.2 FASTENERS

- A. Exposed Fasteners: Stainless steel or chromium plated brass, finish to match adjacent surface.
- B. Concealed Fasteners: Steel, hot-dip galvanized//; except in high moisture areas such as showers, use stainless steel//.
- C. Toggle Bolts: For use in hollow masonry or frame construction.
- D. Hex Bolts: For through bolting on thin panels.
- E. Expansion Shields: Lead or plastic as recommended by accessory manufacturer for component and substrate for use in solid masonry or concrete.
- F. Screws:
1. ASME B18.6.4.

G. Adhesive: As recommended by manufacturer for products to be joined.

2.3 FINISH

- A. In accordance with NAAMM AMP 500 series.
- B. //AA-M32 // Mechanical finish, medium satin. //
 - 1. Chromium Plating: ASTM B456, satin or bright as specified, Service Condition No. SC2.
 - 2. Stainless Steel: NAAMM AMP 503, finish number 4.
 - 3. Ferrous Metal:
 - a. Shop Prime: Clean, pretreat and apply one coat of primer and bake.
 - b. Finish: Over primer apply two coats of alkyd or phenolic resin enamel, and bake.
 - 4. Nylon Coated Steel: Nylon coating powder formulated for a fluidized bonding process to steel to provide a hard smooth, medium gloss finish, not less than 0.3 mm (0.012-inch) thick, rated as self-extinguishing when tested in accordance with ASTM D635.

2.4 FABRICATION - GENERAL

- A. Perform welding in accordance AWS D10.4.
- B. Grind dress, and finish welded joints to match finish of adjacent surface.
- C. Form exposed surfaces from one sheet of stock, free of joints.
- D. Provide steel anchors and components required for secure installation.
- E. Form flat surfaces without distortion. Keep exposed surfaces free from scratches and dents. Reinforce doors to prevent warp or twist.
- F. Shop assemble accessories and package with all components, anchors, fittings, fasteners and keys.
- G. Key items alike.
- H. Provide templates and rough-in measurements as required.
- I. Round and smooth edges of sheets to remove sharp edges.

2.5 PAPER TOWEL DISPENSERS

- A. Surface mounted type with sloping top for Household Aides Closets.
- B. Dispensing capacity for 300 sheets of any type of paper toweling.
- C. Fabricate of stainless steel.
- D. Provide door with continuous hinge at bottom, and spring tension cam lock or tumbler lock, keyed alike, at top and a refill sight slot in front.

2.6 COMBINATION PAPER TOWEL DISPENSER AND DISPOSAL UNITS

- A. //Recessed // and // semi-recessed // type for public use spaces.

- B. Dispensing capacity for 400 sheets of any type of paper toweling.
- C. Fabricate of stainless steel.
- D. Form face frames, from one piece.
- E. Provide each door with continuous stainless steel piano hinge and tumbler lock, keyed alike.
- F. Provide removable waste receptacle approximately 40 liter (10.5 gallon) capacity, fabricated of 0.45 mm (0.018 inch) thick stainless steel.

SPEC WRITER NOTES:

1. This type of waste receptacle is not applicable for public or staff spaces; only consider for Household Aides Closets.

2.7 WASTE RECEPTACLES

- A. Semi-recessed type, without doors.
- B. Fabricate of stainless steel.
- C. Form face frame from one piece.
- D. Provide removable waste receptacle of approximately (12 gallon) capacity, fabricated of stainless steel.
- E. Waste receptacle key locked in place.

2.8 TOILET TISSUE DISPENSERS

- A. Double roll surface mounted type.
- B. Mount on continuous back plate.
- C. Removable spindle ABS plastic or chrome plated plastic.
- D. Wood rollers are not acceptable.

2.9 GRAB BARS

- A. Comply to ASTM F446.
- B. Fabricate of stainless steel or nylon coated steel, except use only one type throughout the project:
 1. Stainless Steel: Grab bars, flanges, mounting plates, supports, screws, bolts, and exposed nuts and washers.
 2. Nylon Coated Steel: Grab bars and flanges complete with mounting plates and fasteners. //Color is specified under Section 09 06 00, SCHEDULE FOR FINISHES. //
- C. Concealed mount, except grab bars mounted at floor, swing up and on metal // toilet // shower // partitions.
- D. Bars:
 1. Fabricate from 32 mm (1-1/4 inch) outside diameter tubing.
 - a. //Stainless steel, minimum 1.2 mm (0.0478 inch) thick. //
 - b. //Nylon coated bars, minimum 1.5 mm (0.0598 inch) thick. //

2. Fabricate in one continuous piece with ends turned toward walls, except swing up and where grab bars are shown continuous around three sides of showers, bars may be fabricated in two sections, with concealed slip joint between.
 3. Continuous weld intermediate support to the grab bar.
 4. Swing up bars manually operated. Designed to prevent bar from falling when in raised position.
- E. Flange for Concealed Mounting:
1. Minimum of 2.65 mm (0.1046 inch) thick, approximately 75 mm (3 inch) diameter by 13 mm (1/2 inch) deep, with provisions for not less than three set screws for securing flange to back plate.
 2. Insert grab bar through center of the flange and continuously weld perimeter of grab bar flush to back side of flange.
- F. Flange for Exposed Mounting:
1. Minimum 5 mm (3/16 inch) thick, approximately 75 mm (3 inch) diameter.
 2. Insert grab bar through flange and continuously weld perimeter of grab bar flush to backside of flange.
 3. Where mounted on metal // toilet // shower // partitions, provide three equally spaced, countersunk holes, sized to accommodate 5 mm (3/16 inch) diameter bolts.
 4. Where mounted on floor, provide four equally spaced holes, sized to accommodate 5 mm (3/8 inch) diameter bolts, not more than 5 mm (3/8 inch) from edge of flange.
- G. Instead of providing flange for concealed mounting, and back plate as specified, grab rail may be secured by being welded to a back plate and be covered with flange.
- H. Back Plates:
1. Minimum 2.65 mm (0.1046 inch) thick metal.
 2. Fabricate in one piece, approximately 6 mm (1/4 inch) deep, with diameter sized to fit flange. Provide slotted holes to accommodate anchor bolts.
 3. Furnish spreaders, through bolt fasteners, and cap nuts, where grab bars are mounted on // metal // _____ // partitions.

2.10 SHOWER CURTAIN RODS

- A. Stainless steel tubing, ASTM A1011, minimum 1.27 mm (0.050 inch) wall thickness, 32 mm (1-1/4 inch) outside diameter.

- B. Flanges, stainless steel rings, 66 mm (2 5/8 inch) minimum outside diameter, with 2 holes opposite each other for 6 mm (1/4 inch) stainless steel fastening bolts. Provide a set screw within the curvature of each flange for securing the rod.

SPEC WRITER NOTES:

1. Use intermediate support for intersection of rods or where bent rod occurs. Show on details.

- C. Intermediate support for rods over 1800 mm (six feet) long. Provide adjustable ceiling flanges with set screws, tubular hangers and stirrups.

SPEC WRITER NOTES:

1. Use terminology shown on drawings.

2.11 CLOTHES HOOKS-ROBE OR COAT

- A. Fabricate hook units of chromium plated brass, with a satin finish, or stainless steel, using 6 mm (1/4 inch) minimum thick stock, with edges and corners rounded smooth to the thickness of the metal, or 3 mm (1/8 inch) minimum radius.
- B. Fabricate each unit as a double hook on a single shaft, integral with or permanently fastened to the wall flange, provided with concealed fastenings.

2.12 TOWEL BARS

- A. Surface mounted type.
- B. Stainless steel with minimum thickness of 0.38 mm (0.015 inch); 19 mm (3/4 inch) diameter, or 16 mm (5/8 inch) square.
- C. Bar Length: 450 and 600 mm (18 and 24 inches) as shown.
- D. Finish of brackets or supports same as bar; //bright polish//
//satin//.

2.13 METAL FRAMED MIRRORS

- A. Mirror Glass:
1. Minimum 6 mm (1/4 inch) thick.
 2. Set mirror in a protective vinyl glazing tape.
- B. Frames:
1. Channel or angle shaped section with face of frame not less than 9 mm (3/8 inch) wide. Fabricate with square corners.
 2. Use 0.9 mm (0.0359 inch) thick stainless steel.
 3. Filler:

- a. Where mirrors are mounted on walls having ceramic tile wainscots not flush with wall above, provide fillers at void between back of mirror and wall surface.
 - b. Fabricate fillers from same material and finish as the mirror frame, contoured to conceal the void behind the mirror at sides and top.
- C. Back Plate:
- 1. Fabricate back plate for concealed wall hanging of zinc-coated or cadmium plated 0.9 mm (0.036 inch) thick sheet steel, die cut to fit face of mirror frame, and furnish with theft resistant concealed wall fastenings.
 - 2. Use set screw type theft resistant concealed fastening system for mounting mirrors.
- D. Mounting Bracket:
- 1. Designed to support mirror tight to wall.
 - 2. Designed to retain mirror with concealed set screw fastenings.

SPEC WRITER NOTES:

- 1. Delete cabinet types not used. Ensure that cabinets are detailed.

2.14 SOAP DISHES

- A. Class 1, Surface Mounted:
- 1. One piece with provisions for exposed fasteners.
 - 2. Fabricate from chromium plated brass approximately 115 by 95 mm (4 1/2 by 3-3/4 inches) overall size with drainage openings at bottom.
- B. Recessed:
- 1. One piece seamless shell and flange with provisions for concealed fasteners.
 - 2. Fabricate from chromium plated brass or 0.8 mm (0.0329 inch) thick stainless steel.
 - 3. Form surface of soap tray with raised ridges or patterned dimples to provide gripping surface for soap bar, or provide flush soap tray with a retaining lip. Plastic soap trays or tray inserts are not acceptable.

2.15 SANITARY NAPKIN DISPOSAL

- A. Fabricate a Type 304 stainless steel sanitary napkin disposal with removable leak-proof receptacle for disposable liners.
- B. Provide // 50 // _____ // disposable liners of the type standard with the manufacturer.
- C. Retain receptacle in cabinet by tumbler lock.

- D. Provide disposal with a door for inserting disposed napkins, // recessed // partition mounted, double access // surface mounted // .

2.16 TOILET SEAT COVER DISPENSER

- A. Provide Type 304 stainless steel with // recessed mounted // surface mounted // toilet seat cover dispensers. Provide dispenser with a minimum capacity of 500 seat covers.

2.17 DIAPER CHANGING STATION

- A. Provide // recess mount // surface mounted // diaper changing station fabricated of high impact plastic interior with no sharp edges; Type 304 stainless steel cover exterior closed position.
- B. Provide fold down platform concave to the child's shape, equipped with nylon and hook and loop safety straps and engineered to withstand a minimum static load of 113 kg (250 lb.).
- C. Provide an integral dispenser for sanitary liners for each unit.
- D. Provide pictorial for universal use of safety graphics.

2.18 ELECTRIC HAND DRYER

- A. Provide wall mount and electric hand dryer designed to operate at 110/125 volts, 60 cycle, single phase alternating current with a heating element core rating of a maximum 2100 watts.
- B. Provide dryer housing of single piece construction and of // white porcelain enamel // chrome plated steel // baked electrostatically applied epoxy // _____ //.
- C. Submit // 4 // _____ // complete copies of maintenance instructions listing routine maintenance procedures and possible breakdowns; include repair instructions for simplified wiring and control diagrams and other information necessary for unit maintenance.

2.19 MOP RACKS

- A. Minimum 1.0M (40 inches) long with five holders.
- B. Clamps:
 1. Minimum of 1.3 mm (0.050-inch) thick stainless steel bracket retaining channel with a hard rubber serrated cam; pivot mounted to channel.
 2. Provide clamps to hold handles from minimum 13 mm (1/2-inch) to 32 mm maximum (1-1/4 inch) diameter.
- C. Support:
 1. Minimum of 1 mm (0.0375 inch) thick stainless steel hat shape channel to hold clamps away from wall as shown.

2. Drill wall flange for 3 mm (1/8 inch) fasteners above and below clamp locations.

D. Secure clamps to support with oval head machine screws or rivets into continuous reinforcing back of clamps.

E. Finish on stainless Steel: AMP 503-No. 4.

2.20 STAINLESS STEEL SHELVES, TYPES //45 // AND // 45C //

A. Fabricate shelves and brackets to design shown of 1.2 mm (0.0478-inch) thick stainless steel.

B. Round and finish smooth projecting corners of shelves and edge corners of brackets. Drill brackets for 6 mm (1/4-inch) anchor bolts.

C. Screw or weld brackets to shelves.

2.21 STAINLESS STEEL SHELVES AT WHEELCHAIR LAVATORY

A. Side Wall Mounted:

1. Fabricate to size and shape shown of 1.2 mm (0.0478 inch) thick sheet.

2. Turn up edges and weld corners closed.

3. Fabricate brackets and weld to shelf. Drill brackets for 6 mm (1/4 inch) anchor bolts.

B. Back Wall Mounted:

1. Fabricate to size and shape shown of plate and tube.

2. Turn up edges and weld corners of shelf.

3. Weld tube to back plate and shelf, weld back plate to shelf, filler plate to tube, and corners of shelf with continuous welds.

4. Drill back plate for 6 mm (1/4 inch) anchor bolts.

PART 3 - EXECUTION

3.1 PREPARATION

A. Before starting work notify RE/COR in writing of any conflicts detrimental to installation or operation of units.

B. Verify with the RE/COR the exact location of accessories.

3.2 INSTALLATION

A. Set work accurately, in alignment and where shown; plumb, level, free of rack and twist, and set parallel or perpendicular as required to line and plane of surface.

B. Toggle bolt to steel anchorage plates in frame partitions or hollow masonry. // Expansion bolt to concrete or solid masonry. //

C. Install accessories in accordance with the manufacturer's printed instructions and ASTM F446.

D. Install accessories plumb and level and securely anchor to substrate.

- E. Install accessories in a manner that will permit the accessory to function as designed and allow for servicing as required without hampering or hindering the performance of other devices.
- F. Position and install dispensers, and other devices in countertops, clear of drawers, permitting ample clearance below countertop between devices, and ready access for maintenance as needed.
- G. Align mirrors, dispensers and other accessories even and level, when installed in battery.
- H. Install accessories to prevent striking by other moving, items or interference with accessibility.

SPEC WRITER NOTES:

1. Location of accessories may be scheduled (if necessary) at the end of this section, however the accessories scheduled must also be shown on the floor plans and the toilet and bath room elevations.

3.3 CLEANING

- A. After installation, clean as recommended by the manufacturer and protect from damage until completion of the project.

- - - E N D - - -